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## CLAIMS

1 A method of treating restless legs syndrome, comprising administrating an effective amount of at least one adenosine  $A_{2A}$  receptor antagonist to a patient in need thereof.

- The method of treating restless legs syndrome according to claim 1 wherein the adenosine  $A_{2A}$  receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.
- The method of treating restless legs syndrome according to claim 2 wherein the xanthine derivative is represented by the following formula (I):

$$R^1$$
 $N$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^2$ 

wherein  $R^1$ ,  $R^2$ , and  $R^3$  independently represent hydrogen, lower alkyl, lower alkenyl, or lower alkynyl;  $R^4$  represents cycloalkyl,  $-(CH_2)_n-R^5$  (in which  $R^5$  represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or

{in which  $Y^1$  and  $Y^2$  independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or

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(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3)}; and  $X^1$  and  $X^2$  independently represent 0 or S.

The method of treating restless legs syndrome according to claim 2 wherein the xanthine derivative is represented by the following formula (I-A):

(I-A)

wherein  $R^{1a}$  and  $R^{2a}$  independently represent methyl or ethyl;  $R^{3a}$  represents hydrogen or lower alkyl; and  $Z^a$  represents

(in which at least one of  $R^7$ ,  $R^8$  and  $R^9$  represents lower alkyl or lower alkoxy and the others represent hydrogen;  $R^{10}$  represents hydrogen or lower alkyl) or

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(in which  $R^6$  and m have the same meanings as defined above, respectively).

- The method of treating restless legs syndrome according to claim 2 wherein the xanthine derivative is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.
- 6 Use of the adenosine  $A_{2A}$  receptor antagonist described in any one of claims 1 to 5 for manufacturing a therapeutic agent for restless legs syndrome.
- 7 A therapeutic agent for restless legs syndrome comprising the adenosine  $A_{2A}$  receptor antagonist described in any one of claims 1 to 5.
- A method of treating nocturnal myoclonus, comprising administrating an effective amount of the adenosine  $A_{2A}$  receptor antagonist described in any one of claims 1 to 5 to a patient in need thereof.